

CLMPTO

09/23/04

CM.

**Claim 1 (Original) A method for providing contrast for alignment marks after a blanket metal deposition, comprising the steps of:**

**providing at least one trench in a first region and at least one trench in an alignment mark region of a semiconductor wafer;**

**depositing a first metal on the wafer;**

**blocking the first metal from filling the at least one trench in the alignment mark region to maintain the at least one trench in the alignment mark region in an unfilled state;**

**planarizing the wafer to remove the first metal from a top surface; and**

**blanket depositing a second metal layer on the first region and the alignment mark region such that the at least one trench in the alignment mark region is suitable for use as a scattering alignment mark.**

**Claim 2 (Original) The method as recited in claim 1, wherein the step of blocking the first metal deposition includes the steps of:**

**forming a seed layer over the wafer;**

**patterning a resist layer over the seed layer such that the seed layer in the at least one trench in the alignment mark region is exposed; and**

**etching the seed layer from the at least one trench in the alignment mark region such that when the first metal layer leaves the at least one trench in the alignment mark region unfilled after the deposition of the first metal layer.**

**Claim 3 (Original)** The method as recited in claim 1, further comprising the step of scanning the wafer with laserlight to determine the position of the at least one trench in the alignment mark region.

**Claim 4 (Original)** The method as recited in claim 3, wherein the step of scanning the wafer with laserlight includes performing a laserlight scattering alignment.

**Claim 5 (Currently amended)** The method as recited in claim 1, wherein the step of blanket depositing the second metal layer includes ~~blanket~~ conformally depositing the second metal layer ~~in the to a thickness less than an amount needed to completely fill the~~ at least one trench in the alignment mark region such that the at least one trench is under filled.

**Claim 6 (Original)** The method as recited in claim 1, wherein the step of blocking the first metal deposition includes the steps of:

forming a block layer in the first region and in the alignment mark region to fill the at least one trench; and

patterning the block layer to remove the block layer from portions of the wafer other than the at least one trench in the alignment mark region.

CLAIMS 7-18. (CANCELLED)

**Claim 19** The method as recited in claim 5, wherein the under filled trench provides distinct interfaces against which a photomask or subsequently processed layers can be aligned.